

REMARKS/ARGUMENTS

Claims 1-7 and 9-20 are pending in this application. Claim 1 has been amended to include claim 8. Claim 9 has been amended for minor editorial purposes. Claim 8 has been canceled without prejudice or disclaimer. No new matter has been added.

Reconsideration of the pending claims of the present application is requested in view of the following remarks.

Rejection under 35 U.S.C. § 112

The rejection of claim 9 under 35 U.S.C § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is respectfully traversed and rendered moot. Claim 9 has been amended to remove the term “aromatic” as shown above for minor editorial purposes. However, Applicants note that the “dialkyl ester A)” in amended claim 9 clearly refers to the “dialkyl ester A) *of an aromatic dicarboxylic acid*,” as recited in claim 1. (Emphasis added).

Therefore, withdrawal of the rejection is requested.

Rejection Under 35 U.S.C. § 103

The rejection of claims 1-20 are rejected under 35 U.S.C. §103(a) as obvious over DD 145540A to Janzen et al. is respectfully traversed.

Janzen et al. does not describe or suggest the two-stage process for purifying and cooling a gas stream, as recited in amended claim 1.

In the two-stage process of the present application, a significant improvement is that DMT can be separated off from a gas stream without formation of industrially very difficult-to-handle DMT solids (desublimates), and the gas stream which has been purified in this way can subsequently be cooled without solids formation. It is achieved industrially by appropriate temperature and concentration conditions in the two stages of the process, which cannot be derived from the cited references of record.

For instance, in Janzen et al., two stages are formally indicated for purification, but the second stage is preferably carried out at 110 - 130°C (see claim 1); a combination is not encompassed or recommended according to the invention. However, even with the reference's

mentioning of two stages, Applicants point out that the second stage is in no way technically comparable to the presently claimed process.

In particular, in Janzen et al., a gas is pushed through a liquid (see figure), which leads to an extreme pressure drop (which is not technically comparable to "quenching"). Specifically, even if the liquid were there to reach the indicated 20°C, the contact time is not sufficient to cool the gas due to the circumstances of the apparatus. If appropriately long contact times were employed, cooling would still not be appreciable and the mode of operation would also become uneconomical.

Further, on entering this stage, a tremendous pressure drop occurs (from a gauge pressure 500 mbar to ambient pressure on exit). Downstream of this pressure drop, the stock tank would have to be designed appropriately for 1013 + 500 mbar gauge pressure, i.e. about 2 bar. However, this would lead to an increase in the thickness, larger pumps, etc.

As such, these lower limits cannot be achieved technically using the apparatus and mode of operation in Janzen et al.

Correspondingly, it is also recited on page 2 of Janzen et al. that (last 4 lines, middle paragraph) an additional discharge (water separator) is required because of entrained volatile components.

Overall, some "multistage" work-ups are mentioned in Janzen et al., but either only cooling or only scrubbing is carried out.

For the Office's convenience, the multistage work-up, as differentiated from the claimed invention and mentioned in the present specification, is shown in the table below.

Patent No.	Scrubbing medium	Apparatus	Remarks	Mentioned in Present Specification; Differentiation
DD 145540	Glycol	Chamber vessel with bubble column + scrubber; multistage	Storage of molten DMT, glycol used as scrubbing and barrier liquid; recirculation of DMT to process	Present specification at page 2, ll. 20-32 *no cooling described *high pressure drop due to barrier liquid

Applicants point out that in the case of the above “scrubbing,” hot offgas (not permissible) is formed, there is a very high gaseous output, and DMT is lost in relatively large amounts. These effects are shown clearly by the comparative examples in the present specification.

Therefore, in view of the above remarks, the claimed process is novel and unobvious over Janzen et al., since there is clearly no indication or suggestion of such a two-stage process. Accordingly, Applicants respectfully request that this rejection of the present claims under 35 U.S.C. §103(a) be withdrawn.

In light of the remarks above, Applicants submit that the application is in condition for allowance. Favorable reconsideration is respectfully requested.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

The Office is authorized to charge any necessary fees to Deposit Account No. 03-2775.

Application No. 10/552,285
Reply to Office Action of September 30, 2008
Amendment dated December 30, 2008

Docket No.: 12810-00146-US1

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 12810-00146-US1 from which the undersigned is authorized to draw.

Dated: December 30, 2008

Respectfully submitted,

Electronic signature: /Bryant L. Young/
Bryant L. Young
Registration No.: 49,073
CONNOLLY BOVE LODGE & HUTZ LLP
1875 Eye Street, NW
Suite 1100
Washington, DC 20006
(202) 331-7111
(202) 293-6229 (Fax)
Attorney for Applicant